REMARKS

Claims 1-68 are remaining in this application, with Claims 45, 54-56, 58 and 62 amended above, and new Claims 64-68 added. At the outset, the Applicant acknowledges with appreciation the allowance of Claims 1-33 and 48-53. The Applicant notes that the amendments to the claims are intended solely to place them in better form for allowance, and are not considered necessary to distinguish the prior art reference cited by the Examiner. The Applicant respectfully requests reconsideration and review of the application in view of the following remarks.

Before addressing the merits of the rejections based on prior art, the Applicant provides the following brief description of the application. The application is directed to a transaction terminal, such as an automated transaction machine (ATM), that provides significantly greater flexibility and convenience than conventional ATMs, and is also referred to in the application as a Super-ATM. A limitation of conventional ATMs is that they communicate only using the standard industry protocol/message set defined by ISO 8583, and as a result conventional ATMs can only perform certain types of financial transactions (e.g., withdrawing cash, checking account balance, etc.) The transaction terminal of the present application communicates using plural types of protocols/message sets, and can therefore communicate with other types of computer networks besides the ATM network, such as the point-of-sale (POS) protocol used to communicate credit card transactions with commercial banking networks and the TCP/IP protocol used on the Internet. Thus, the transaction terminal can enable many different kinds of transactions than conventional ATMs, including purchasing goods/services, checking e-mail messages and paying bills. Moreover, the transaction terminal can accept payment using many different options, including currency, credit/debit cards or check. It should be understood that the transaction terminal of the present invention need not be limited to fixed location terminals, such as conventional ATMs, but could also include wireless communication devices such as personal digital assistants (PDAs), cellular telephones, laptop computers, etc.

More particularly, in an embodiment of the present invention, a host computer manages transactions with plural transaction terminals, and communicates with plural destination networks to satisfy the transactions. The host computer processes each of these transactions asynchronously and manages the state of each transaction. Specifically, the host computer parses a transaction request from a transaction terminal into plural transaction components, and identifies dependencies between the plural transaction components. Then, the host computer communicates with the plurality of destination networks in an order defined by the dependencies.

In an example that illustrates the asynchronous transaction management of the present invention, a transaction terminal may request a particular complex transaction having many components, e.g., a user desires to buy a money order, movie tickets and pay some bills, and wants to pay for these with a combination of credit card and cash. Not only could a conventional ATM not provide any of these exemplary services, the limited services that an ATM provides (e.g., checking account balance, withdrawing cash, transferring funds between accounts) are executed as individual transactions that must each be completed before another transaction is started. The transaction terminal of the present invention allows all of these transactions to be requested at the same time. The host computer then parses the complex transaction into components, and determines the best order of processing the components as well as which components may be executed simultaneously. Continuing the foregoing example, the host computer may first communicate an authorization message to the credit card computer network to determine if there is sufficient credit to continue the transactions. While waiting for the response from the credit card computer network, the host computer may proceed with part of the complex transaction (e.g., purchase movie tickets) that may be completed using a cash deposit, by communicating a message to the movie ticket computer network. Meanwhile, after an affirmative response from the credit card computer network is received (while waiting to hear back from the movie ticket computer network), the host computer then communicates with destination networks pertinent to the

portions of the complex transaction relating to the credit card authorization (e.g. purchasing a money order or paying a monthly electric bill). This asynchronous transaction management enables complex transactions to be handled at a much faster rate than conventional ATM transactions.

The Examiner rejected Claims 54-57 under 35 U.S.C. § 102(e) as being anticipated by Daly et al. (U.S. Patent No. 5,878,141). The Examiner also rejected Claims 58-63 under 35 U.S.C. § 103(a) as being unpatentable over Daly et al. Further, Claims 34-47 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Daly et al. in view of known prior art. These rejections are respectfully traversed.

Daly et al. is directed to a computerized purchasing system and method for mediating purchase transactions over an interactive network. The Daly purchasing system allows a purchaser to chose a method of paying for goods that is acceptable to the merchant. Also, the purchasing system can determine whether a purchase price exceeds a purchaser's available credit. More particularly, a purchasing transaction is conducted between remote purchasing terminals such as set top boxes (STB) 46 and a head end server 42 as shown in Fig. 3. Referring to Fig. 4, the STB communicates directly with the head end server 42 to get price information for a desired product. The price information is retrieved from a merchant database containing merchandise information and accepted payment methods for merchants that have registered with the purchasing system. A purchase mediator 84 determines a common set of payment methods that are acceptable to both the merchant and the purchaser, and presents these options to the purchaser as shown in Fig. 5.

If there is a match among the payment methods and the purchaser confirms the purchase, then the purchasing system attaches a digital signature of the purchaser to authorize the purchase. This provides assurance to the merchant that an authentic, registered purchaser with sufficient funds has agreed to purchase the goods. (Col. 13, lns. 39-45). The head end server 42 further includes a billing system 86, an acquisition system 88, and an accounting system 90. The consummated purchase is then handled

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entirely within the head end server 42, which maintains a subscriber account, merchant account, and a general ledger. A withdrawal is made from the subscriber account and paid to the merchant account. Notably, the reference does not disclose any communication links between the head end server 42 and any external systems or networks. The reference explains that the merchant database is "formed over time as new viewers subscribe to the system and more merchants participate." (Col. 11, Ins. 60-62). This type of subscription based system suggests that merchants would communicate with the head end server for purposes of subscribing with the system and/or updating the merchant database using a common network and associated protocol, such as the Internet.

In contrast, in one embodiment of the present invention, a transaction terminal sends a transaction request to the host computer. The host computer then translates the request to the appropriate communication protocol of a third party or service provider and forwards the request to the service provider. The service provider responds to the request by transmitting reply information back to the host computer. The host computer translates the received reply information into the required format, if necessary, and then relays the message back to the transaction terminal. In this way, the host computer allows for two-way communications between the transaction terminal and the service provider, even though these two systems may have incompatible communication protocols. Thus, in the present embodiment, all communications between the transaction terminal and the particular service provider occur through the host computer.

As discussed above, Daly et al. facilitates an entire purchase transaction within the head end server, and no communication is disclosed between the head end server and any destination computers. Moreover, the Daly et al. mediator does not perform translation of a transaction request into the communication protocol of a particular destination computer in order to execute the transaction. Similarly, Daly et al. does not perform translation of a reply message from the destination computer back to the

transaction terminal. Therefore, Daly et al. does not provide two-way communication between the transaction terminal and the destination computer. Thus, Daly et al. fails to suggest or disclose "a host computer connected to said ... transaction terminal ... [and] further connected to said plurality of destination computers over separate communication networks using communication protocols unique to each of said destination computers, said host computer thereby providing two-way communication through said host computer between said ... transaction terminal and at least one of said plurality of destination computers in executing said transaction," as defined in Claim 54. Accordingly, Claim 54 is allowable over Daly et al., and Claims 55-58 which depend from Claim 54 are also allowable for at least the same reasons.

With respect to at least Claims 58 and 62, the Examiner stated that "[a]synchronous communications between networked computers is old and well known." The Applicant respectfully submits that there are no asynchronous communication transaction processing systems presently in existence like the present invention. In fact, there has heretofore not been a need to provide real time access to multiple networks simultaneously from a single thin client terminal such as an ATM or a wireless device such as a cellular telephone. It should be appreciated that the use of the term "asynchronous communication" in the present application (illustrated by the foregoing example) is different than the conventional use known within computer arts. Conventionally, computer programmers use the term "asynchronous" to refer to the ability to initiate calls from one function or procedure to another function or procedure without having to first receive a response from an earlier call. Similarly, with respect to modem communication, "asynchronous" refers to an ability of a sending device to send an outbound packet or string without first having to wait for a response to a previous outbound packet or string. In the present invention, "asynchronous" is used to describe the ability of the host computer to carry on plural simultaneous, parallel and independent transaction conversations with destination computer networks. None of the references of record suggest or disclose such "asynchronous" transaction

processing.

In another embodiment of the present invention, the host computer translates a transaction request into a plurality of transaction components having formats that correspond to the respective service providers. Thus, to execute a single transaction request, the host computer communicates with a plurality of service providers. As discussed above, Daly et al. does not disclose communication with any external service providers nor does it translate a request into a plurality of transaction components having formats corresponding to the respective service providers. Instead, Daly et al. discloses the conducting of a single purchase transaction entirely within the head end server. Specifically, Daly et al. does not teach or suggest the steps of "parsing said transaction request ... into plural transaction components corresponding to respective ones of said plurality of destination computers; identifying dependencies between said plural transaction components; and communicating with said plurality of destination computers in an order defined at least in part by said dependencies." Thus, the Applicant respectfully submits that Claim 59 is allowable over Daly et al. Accordingly, Claims 60-63, which depend from Claim 59, are also allowable over Daly et al. for at least the same reasons that Claim 59 is allowable.

In yet another embodiment of the invention, the transaction terminal includes a product multimedia dispenser that dispenses products such as cassette tapes, CD-ROMs, laser disks, DVDs, and microchips that have memory storage. The dispensed products include audio, video, and computer programs. The Examiner admits on Page 3 of the Office Action that Daly et al. does not teach or suggest a "product multimedia dispenser" as recited in Claim 34. In order to cure the deficiency of Daly et al. as to Claim 34, the Examiner states that it is well-known to connect personal computers to an Internet host and download multimedia files and save them to a removable disk. The Examiner apparently relies on personal knowledge of the art without citing any evidence or references in rejecting Claim 34. If the Examiner persists with this ground of rejection in any subsequent action, the Applicant respectfully requests that the Examiner cite

specific references showing such teaching. Regardless, copying and downloading of files from an Internet host to a removable disk residing on a personal computer is not the same as "dispensing a multimedia product" since such a disk is not ordinarily considered a multimedia product. Claim 35, which depends from Claim 34, defines additional aspects of the invention that are not suggested or disclosed by Daly et al. Accordingly, the rejection of Claim 35 should also be withdrawn.

In another embodiment of the present invention, the transaction terminal formats a requested transaction message and communicates directly with the service providers. The Examiner acknowledged in allowing independent Claims 1, 17 and 48 that the "prior art fails to teach or suggest a transaction terminal which in itself formats for and directly communicates with a plurality of service provider computers..." Claim 36 recites a method for performing a transaction with a plurality of service providers from a single transaction terminal where the method includes the steps of: "selecting ... a first service offered by one of the service providers...; converting the request into a message having the format for said ... one of the service providers; and transmitting the formatted message to said...one of the service providers." Accordingly, it is respectfully submitted that Claim 36 is allowable over Daly et al. in view of the known prior art. Further, Claims 37-47, which depend from Claim 36, are also allowable over Daly et al. in view of the known prior art for at least the same reasons that Claim 36 is allowable.

For many of the same reasons stated above, new Claims 64-68 are similarly not suggested or disclosed by any of the references of record. These claims are also deemed to be allowable.

By the foregoing amendments and remarks, the Applicant has diligently attempted to demonstrate that Claims 1-68 are in condition for allowance. Reconsideration and withdrawal of the rejections is respectfully requested, and a timely Notice of Allowability is solicited. The Applicant further requests that the Examiner contact the undersigned attorney of record in a telephonic conference, so that any and all remaining issues bearing on the patentability of the claims may be fully addressed

and resolved.

Our check in the amount of $195.00 is enclosed for the addition of one (1) independent claim in excess of three (3), and the addition of five (5) total claims in excess of twenty (20), pursuant to 37 C.F.R. § 1.16(a, b). The Commissioner is authorized to charge any shortage in the fees, including extension of time fees, to Deposit Account No. 50-0639.

Respectfully submitted,

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